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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BARKER, MATTHEW M

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/805,996	<b>Applicant(s)</b> MOLLER ET AL.	
	<b>Examiner</b> Matthew M. Barker	<b>Art Unit</b> 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 20-26 is/are rejected.
- 7) ☒ Claim(s) 14-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 14 is objected to because of the following informalities: The claim is missing a period. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-13, 20, and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Vidmar et al. (5,028,928).

Regarding claim 1, Vidmar discloses a test stand (Figure 7) comprising a first vertical support column (13) comprising one or more radio frequency absorbers (25, 26, column 15, lines 50-65) distributed over at least a longitudinally extended portion of the first vertical support column. The stand is not disclosed as being part of a radio frequency anechoic chamber, however it could be used in such a capacity.

Regarding claim 3, Vidmar discloses one or more absorbers are disposed proximate a periphery of the vertical column (Figure 7).

Regarding claim 4, Vidmar discloses that one or more radio frequency absorbers are distributed over an area that extends proximate at least a substantial portion of a circumference of the vertical support column (Figure 7).

Regarding claim 5, Vidmar discloses the radio frequency absorbers comprise a layer of radio frequency absorbing material (column 3, lines 43-46, column 15, lines 50-65).

Regarding claim 6, the absorber (25) of Vidmar comprises an edge that comprises a plurality of tapered protrusions that extend substantially longitudinally with respect to the first vertical support column.

Regarding claim 7, as seen in Figure 7, one or more radio frequency absorbers (25) are present in an amount of absorber per unit height that decreases as a function of height along the first vertical support column.

Regarding claim 8, Vidmar shows a vertical support column (13) comprising a hollow tubular member, and one or more radio frequency absorbers (25) are disposed within the tubular member.

Regarding claim 9, the hollow tubular member is circular in cross section.

Regarding claim 10, Vidmar discloses the hollow tubular member comprises a fiberglass tube (column 5, line 3).

Regarding claim 11, Vidmar discloses the radio frequency absorbers comprise a layer of radio frequency absorbing material (column 3, lines 43-46, column 15, lines 50-65).

Regarding claim 12, Vidmar discloses the layer (25) comprises an edge that comprises a plurality of tapered protrusions that extend axially with respect to the vertical support column.

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Regarding claim 13, Vidmar discloses the tube has a diameter of at least 30 centimeters and a wall thickness of less than 1.5 millimeters (column 4, lines 17-54).

Regarding claim 20, Vidmar discloses a first vertical support column (20), comprising one or more absorbers (25, 26) disposed proximate a periphery of the vertical column. The stand is not disclosed as being part of a radio frequency anechoic chamber, however it could be used in such a capacity.

Regarding claim 22, Vidmar discloses a vertical support column (13), and one or more absorbers (25, 26) distributed over at least a longitudinally extended portion of the vertical support column. The stand is not disclosed as being part of a radio frequency anechoic chamber, however it could be used in such a capacity.

Regarding claim 23, as seen in Figure 7, one or more radio frequency absorbers (25) are present in an amount of absorber per unit height that decreases as a function of height along the vertical support column.

Regarding claim 24, Vidmar shows a vertical support column (13) comprising a hollow tubular member, and one or more radio frequency absorbers (25) are disposed within the tubular member.

Regarding claim 25, Vidmar discloses one or more absorbers are disposed proximate a periphery of the vertical column (Figure 7).

Regarding claim 26, Vidmar discloses the radio frequency absorbers comprise a layer of radio frequency absorbing material (column 3, lines 43-46, column 15, lines 50-65).

4. Claims 1, 3-7, 20, 22-23, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Larson (5,099,244).

Regarding claim 1, Larson discloses a test stand (Figure 2) comprising a first vertical support column (20) comprising one or more radio frequency absorbers distributed over at least a longitudinally extended portion of the first vertical support column (See Abstract, lines 4-6). The entire stand of Larson is an absorber; the low dielectric constant foam material is inherently a radio frequency absorber. The stand is not disclosed as being part of a radio frequency anechoic chamber, however it could be used in such a capacity.

Regarding claim 3, because the stand of Larson is a radio frequency absorber, one or more absorbers are disposed proximate a periphery of the vertical column.

Regarding claim 4, because the stand of Larson is a radio frequency absorber, one or more radio frequency absorbers are distributed over an area that extends proximate at least a substantial portion of a circumference of the vertical support column.

Regarding claim 5, the low dielectric constant foam material disclosed by Larson is inherently a radio frequency absorber.

Regarding claim 6, the absorber of Larson comprises an edge that comprises a plurality of tapered protrusions (23, 31) that extend substantially longitudinally with respect to the first vertical support column.

Regarding claim 7, as seen in Figure 2, one or more radio frequency absorbers are present in an amount of absorber per unit height that decreases as a function of height along the first vertical support column.

Regarding claim 20, Larson discloses a first vertical support column (20), comprising one or more absorbers disposed proximate a periphery of the vertical column. The entire stand of Larson is an absorber; the low dielectric constant foam material (See Abstract, lines 4-6) is inherently a radio frequency absorber. The stand is not disclosed as being part of a radio frequency anechoic chamber, however it could be used in such a capacity.

Regarding claim 22, Larson discloses a vertical support column (20), and one or more absorbers (23,32) distributed over at least a longitudinally extended portion of the vertical support column. The entire stand of Larson is an absorber; the low dielectric constant foam material (See Abstract, lines 4-6) is inherently a radio frequency absorber. The stand is not disclosed as being part of a radio frequency anechoic chamber, however it could be used in such a capacity.

Regarding claim 23, as seen in Figure 2, one or more radio frequency absorbers are present in an amount of absorber per unit height that decreases as a function of height along the vertical support column.

Regarding claim 25, because the stand of Larson is a radio frequency absorber, one or more absorbers are disposed proximate a periphery of the vertical column.

Regarding claim 26, the low dielectric constant foam material disclosed by Larson is inherently a radio frequency absorber.

5. Claims 1, 3-5, 20, 22, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Tricoles et al. (4,274,048).

Regarding claim 1, Tricoles discloses a test stand (Figure 2) for use in an anechoic chamber comprising a first vertical support column (23) comprising one or more radio frequency absorbers (20) distributed over at least a longitudinally extended portion of the first vertical support column (column 3, lines 13-14). The absorbing material disclosed in column 3, lines 13-14 is understood by one of ordinary skill in the art to be radio frequency absorbing material.

Regarding claim 3, Tricoles discloses one or more absorbers are disposed proximate a periphery of the vertical column (column 3, lines 13-14).

Regarding claim 4, Tricoles discloses that one or more radio frequency absorbers are distributed over an area that extends proximate at least a substantial portion of a circumference of the vertical support column (column 3, lines 13-14).

Regarding claim 5, Tricoles discloses the radio frequency absorbers comprise a layer of radio frequency absorbing material (column 3, lines 13-14).

Regarding claim 20, Tricoles discloses a first vertical support column (23), comprising one or more absorbers disposed proximate a periphery of the vertical



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column (column 3, lines 13-14). The absorbing material disclosed in column 3, lines 13-14 is understood by one of ordinary skill in the art to be radio frequency absorbing material.

Regarding claim 22, Tricoles discloses a vertical support column (23), and one or more absorbers distributed over at least a longitudinally extended portion of the vertical support column (column 3, lines 13-14). The absorbing material disclosed in column 3, lines 13-14 is understood by one of ordinary skill in the art to be radio frequency absorbing material.

Regarding claim 25, Tricoles discloses one or more absorbers are disposed proximate a periphery of the vertical column (column 3, lines 13-14).

Regarding claim 26, Tricoles discloses the radio frequency absorbers comprise a layer of radio frequency absorbing material (column 3, lines 13-14).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vidmar as applied to claims 1 and 20 above, and further in view of Takahashi (5,812,080).

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Vidmar does not explicitly disclose that the radar frequency absorbers are comprised of carbon filled foam.

Takahashi discloses a radio frequency absorber comprising carbon filled foam (column 7, lines 21-24). It would have been obvious to use carbon filled foam taught by Takahashi as the absorber in the stand of Vidmar, as carbon filled foam is a well-known dielectric material for use in radio wave absorption.

8. Claims 2 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larson as applied to claims 1 and 20 above, and further in view of Takahashi (5,812,080).

Larson does not explicitly disclose that the low dielectric foam of the frequency absorbers is carbon filled foam.

Takahashi discloses a radio frequency absorber comprising carbon filled foam (column 7, lines 21-24). It would have been obvious to use carbon filled foam taught by Takahashi as the absorber in the stand of Larson, as carbon filled foam is a well-known dielectric material for use in radio wave absorption.

9. Claims 2 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tricoles as applied to claims 1 and 20 above, and further in view of Takahashi (5,812,080).

Tricoles does not explicitly disclose that the frequency absorbers are comprised of carbon filled foam.

Takahashi discloses a radio frequency absorber comprising carbon filled foam (column 7, lines 21-24). It would have been obvious to use carbon filled foam taught by

Takahashi as the absorber in the stand of Tricoles, as carbon filled foam is a well-known dielectric material for use in radio wave absorption.

***Allowable Subject Matter***

10. Claims 14-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ishihara et al., Holloway, Berg, Overholser, Delfeld, James, and McHenry relate to anechoic chamber test stands and/or radio wave absorbers.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew M. Barker whose telephone number is (571)272-3103. The examiner can normally be reached on M-F, 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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